Nevada State Health Division
Technical Bulletin

Topic: Assigning Tuberculosis (TB) Risk Classification in Nevada's Health Care Facilities to Determine Frequency of TB Screening for Health Service Workers
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TO: All Nevada Health Services Facilities

The purpose of this technical bulletin is to assist facilities in Nevada that employ health-service workers or volunteers to evaluate the risk of exposure to tuberculosis (TB) in order to enable facilities to correctly assign a TB risk category to their facility, and ultimately establish appropriate TB screening protocols.

In accordance with NAC 441A.375[1] a medical facility, a facility for the dependent, or a home for individual residential care shall maintain surveillance of employees of the facility or home for tuberculosis and tuberculosis infection. The surveillance of employees must be conducted in accordance with the guidelines[2] from the Centers for Disease Control and Prevention for preventing the transmission of tuberculosis in facilities providing health care services. NAC 441A.375 also mandates a tuberculosis screening test be administered before initial hire of all employees and a single annual tuberculosis screening test must be administered thereafter, unless the medical director of the facility or his designee or another licensed physician determines that the risk of exposure is appropriate for a lesser frequency of testing and documents that determination. The risk of exposure and corresponding frequency of examination must be determined by following the guidelines[2] of the Centers for Disease Control and Prevention as adopted by subsection 1, reference in paragraph (h) of NAC 441A.200

The CDC **Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005**[2] provides a risk assessment worksheet (MMWR Vol. 54/RR-17 (*Appendix B*)) to help facilities think about the specifics of their setting and allows the facility to determine its own risk classification (MMWR Vol. 54/RR-17 (*Appendix C*)). Based upon the risk classification (low, medium or ongoing transmission) the guidelines recommend a screening frequency.

Careful consideration must be taken when establishing and/or revising a facility's risk classification:

A) The Nevada State Health Division, in consultation with the CDC has established that The Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005 MMWR (*Appendix C)* is to be utilized in its entirety. A facility may not apply only one aspect of these guidelines by CDC

[1] http://www.leg.state.nv.us/NAC/NAC-441A.html#NAC441ASec375

[2] MMWR Vol. 54 / RR-17 Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005

(*Appendix C)* when determining the risk classification for a setting, unless it applies the highest risk classification recommended for a particular unit in the facility to the entire setting; thereby meeting the minimum requirements for all criteria. It is recommended that a risk classification be determined for the entire setting. However, in certain settings (e.g., health-care organizations that encompass multiple sites or types of services), specific areas defined by geography, functional units, patient population, job type, or location within the setting might have separate risk classifications.[3] In these instances, a risk classification must be determined for each setting in the facility on an annual basis, independent of each other.

B) Special attention should also be given to the notes section of *Appendix C (page 3 of this technical bulletin)* which may affect testing frequency, regardless of the risk classification.

1) It is recommended that settings which could be categorized as low risk and treat populations at high risk for TB disease (HIV or other immunocompromising conditions) be classified as medium risk.[4] (see Risk Classification†)

2) There can be occasion to not perform baseline or serial TB screenings for HCWs who: 1) will never be in contact with or have shared air space with patients who have TB disease (e.g., telephone operator who works in a separate building from patients) or 2) will never be in contact with clinical specimens that might contain *M. tuberculosis*.[3] (see Recommendations for Screening Frequency – Baseline two-step TST or one BAMT ¶)

3) It is also noted, HCW's in facilities classified as low risk whose duties do not include contact with patients or TB specimens do not need to be included in serial TB screening program.[3] (see Recommendations for Screening Frequency - No **)

C) If a facility would like to have their administration reclassify the risk classification outside the recommendations of the CDC guidelines, facility Administrator or designee would need to provide documentation (to be retained in the facilities files) attesting to the fact that they are assuming the responsibility for changing TB screening testing frequency.

The Nevada State Health Division, Tuberculosis Control and Elimination Program, in concurrence with Nevada Revised Statutes, Nevada Administrative Codes (NAC) and the CDC, recommends that all health-service workers in Nevada have annual screening tests for Tuberculosis.

Signed:  Date: 4/14/09

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[3] Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005 *MMWR* 2005; page 10

[4] Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005 *MMWR* 2005; page 134

Appendix C. Risk classifications for health-care settings that serve communities with high incidence of tuberculosis (TB) and recommended frequency of screening for *Mycobacterium tuberculosis* infection among health-care workers (HCWs)*

Setting	Risk classification†		
	Low risk	Medium risk	Potential ongoing transmission§
Inpatient <200 beds	<3 TB patients/year	≥3 TB patients/year	Evidence of ongoing *M. tuberculosis* transmission, regardless of setting
Inpatient ≥200 beds	<6 TB patients/year	≥6 TB patients/year	
Outpatient; and nontraditional facility-based	<3 TB patients/year	≥3 TB patients/year	
TB treatment facilities	Settings in which • persons who will be treated have been demonstrated to have latent TB infection (LTBI) and not TB disease • a system is in place to promptly detect and triage persons who have signs or symptoms of TB disease to a setting in which persons with TB disease are treated • no cough-inducing or aerosol-generating procedures are performed	Settings in which • persons with TB disease are encountered • criteria for low risk is not otherwise met	
Laboratories	Laboratories in which clinical specimens that might contain *M. tuberculosis* are not manipulated	Laboratories in which clinical specimens that might contain *M. tuberculosis* are manipulated	
Recommendations for Screening Frequency			
Baseline two-step TST or one BAMT¶	Yes, for all HCWs upon hire	Yes, for all HCWs upon hire	Yes, for all HCWs upon hire
Serial TST or BAMT screening of HCWs	No**	Every 12 months††	As needed in the investigation of potential ongoing transmission§§
TST or BAMT for HCWs upon unprotected exposure to *M. tuberculosis*	Perform a contact investigation (i.e., administer one TST as soon as possible at the time of exposure, and, if the TST result is negative, place another TST 8–10 weeks after the end of exposure to *M. tuberculosis*)¶¶		

* Health-care workers (HCWs) refers to all paid and unpaid persons working in health-care settings who have the potential for exposure to *M. tuberculosis* through air space shared with persons with TB disease.

† Settings that serve communities with a high incidence of TB disease or that treat populations at high risk (e.g., those with human immunodeficiency virus infection or other immunocompromising conditions) or that treat patients with drug-resistant TB disease might need to be classified as medium risk, even if they meet the low-risk criteria.

§ A classification of potential ongoing transmission should be applied to a specific group of HCWs or to a specific area of the health-care setting in which evidence of ongoing transmission is apparent, if such a group or area can be identified. Otherwise, a classification of potential ongoing transmission should be applied to the entire setting. This classification should be temporary and warrants immediate investigation and corrective steps after a determination has been made that ongoing transmission has ceased. The setting should be reclassified as medium risk, and the recommended timeframe for this medium risk classification is at least 1 year.

¶ All HCWs should have a baseline two-step tuberculin skin test (TST) or one blood assay for *M. tuberculosis* (BAMT) result at each new health-care setting, even if the setting is determined to be low risk. In certain settings, a choice might be made to not perform baseline TB screening or serial TB screening for HCWs who 1) will never be in contact with or have shared air space with patients who have TB disease (e.g., telephone operators who work in a separate building from patients) or 2) will never be in contact with clinical specimens that might contain *M. tuberculosis*. Establishment of a reliable baseline result can be beneficial if subsequent screening is needed after an unexpected exposure to *M. tuberculosis*.

** HCWs whose duties do not include contact with patients or TB specimens do not need to be included in the serial TB screening program.

†† The frequency of testing for infection with *M. tuberculosis* will be determined by the risk assessment for the setting.

§§ During an investigation of potential ongoing transmission of *M. tuberculosis*, testing for *M. tuberculosis* infection should be performed every 8–10 weeks until lapses in infection controls have been corrected and no further evidence of ongoing transmission is apparent.

¶¶ Procedures for contact investigations should not be confused with two-step TST, which is used for newly hired HCWs.